

REMARKS/ARGUMENTS

A proposed drawing correction is attached to this response reflecting the change requested by the Examiner in the Office Action dated May 5, 2004. Formal drawings including the proposed change will be filed upon approval of the proposed drawing correction.

Claims 1-2, 5, 7, 8, 10, 11 and 15-18 have been rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicant regards as the invention. Applicants respectfully traverse these rejections.

The Examiner first asserts that step (e) of claim 1 is unclear because it is uncertain how the first crack initiator can be disengaged from the work piece when the cutter base is still cutting. As described at page 4, lines 15+ of the present specification, the first crack initiator is responsible for initiating the crack and driving the crack propagation *over a certain distance* (emphasis added). This means that at a certain point, the first crack initiator no longer is responsible for further propagation of the crack. Rather, the first crack initiator is disengaged from the crack and instead the first cutter base becomes responsible for further crack propagation. While the first crack initiator remains attached to the end of the first cutter base at all times, it disengages from the crack because the first cutter base has been driven far enough into the crack that the space created by the first cutter base is large enough to cause the first crack initiator to fit inside the crack. The first crack initiator essentially becomes idle as the first cutter base becomes solely responsible for further crack propagation. Therefore, the first crack initiator is deemed to be disengaged from the work piece. As the Applicant now believes it should be clear what is meant by the claim language, the Examiner is respectfully requested to withdraw the Section 112, paragraph two rejection for indefiniteness.

The Examiner also asserts that claim 3 is unclear because it is uncertain how the second cutter generates a crack without a crack initiator. It is well known in the art that a crack initiator is not required to generate a crack. As the Background of the Invention explains (see e.g., page 2) and as can be seen from prior art Figure 1, rake cutters without crack initiators are capable of generating cracks and are well known in the art to achieve such results. However, cutting

apparatus that do not employ a crack initiator are subject to higher wear rate, shorter tool life, and may generate undesirable defects such as skiving, chipping, burr, dust, hair, cracking and delamination. As the Applicant now believes it should be clear what is meant by the claim language, the Examiner is respectfully requested to withdraw the Section 112, paragraph two rejection for indefiniteness.

Claims 1-3, 7, 8, 10, 11, 17 and 18 have been rejected under 35 U.S.C. 102(b) as anticipated by Fruit. Applicants respectfully traverse these rejections.

The main basis for the Examiner's argument is that Fruit discloses the same apparatus for cutting sheet material as the present application including engaging a first side of the sheet material with a first crack initiator, generating a first crack in the first side of the sheet material with the first crack initiator, and engaging the sheet material with the cutter base of the first cutter by moving the first cutter perpendicular to the sheet material.

It should first be noted that Fruit does not teach the cutting of sheet material, but rather discloses a tool resembling a pair of shears that are designed to cut steel bands or straps used around packages. Therefore, from a threshold standpoint, Fruit does not disclose the same invention as the present application because it is not directed to, nor would it likely be able to cut, sheet material.

Further, Fruit does not disclose the same invention as the present application because nibs 12 and 13 of the package band cutter are not crack initiators. Rather, the nibs serve to extend over the steel strap or band and retain the strap or band in position for cutting by the blades (col. 1, lines 11-18). Whereas the present invention employs crack initiators to generate the crack, nibs 12 and 13 of the Fruit reference merely serve as a means for holding the strap or band in place and play no part in the actual cutting of the strap or band. Figure 2 of the Fruit reference does not show the nibs 12 and 13 as being engaged into the strap or band, but rather show that they are slipped underneath the strap of band for the purpose of holding the strap or band in place. The cutting blades 10 and 11 are solely responsible for the cutting of the strap of band. Therefore, because the nibs 12 and 13 are not crack initiators, Fruit does not disclose each and every element of the presently claimed invention and a Section 102 rejection based on Fruit is therefore improper.

Fruit also fails to disclose a cutting apparatus wherein the cutter is moved perpendicular to the sheet as required by claim 1 of the present invention. In fact, Fruit explicitly teaches away from perpendicular cutting. The object of the Fruit reference, according to col. 1, lines 19-24, is to “provide means for shearing steel bands or straps around packages, cartons and other containers *without the necessity of forcing a blade of a shear under the strap and then turning the shear into a position perpendicular to the strap for cutting* (emphasis added). The cutting shears disclosed in Fruit are designed to allow the user to cut the steel bands or strap around packages at an angle almost equal to parallel with the strap or band. To the contrary, claim 1 of the present invention requires the apparatus to move perpendicular to the sheet material while cutting. This significant difference further supports the withdrawal of the Section 102 rejection based on Fruit, and the Examiner’s compliance is respectfully requested.

Claims 5, 15 and 16 have been rejected under 35 U.S.C. 103(a) as obvious over Fruit in view of Camp et al. Applicants respectfully traverse this rejection.

The Examiner alleges that Fruit discloses the invention including a crack initiator having a height that is at least 20µm. However, nowhere in the Fruit reference is there any indication of a teaching that discloses a crack initiator having a height that is at least 20 µm, and the Examiner has not included a reference to where in the Fruit document such a disclosure can be found. Mere reference to nib 12 does not suffice to disclose a crack initiator having a height of at least 20 µm. In fact, as discussed above, Fruit fails to disclose a crack initiator (let alone a crack initiator having a height of at least 20 µm) since nibs 12 and 13 function to hold the strap or band in place, not generate a crack in the strap of band.

The Applicant is also unable to find where in the Camp reference there is any disclosure of a crack initiator that has a height greater than the thickness of a protective coating and the Examiner has given no indication as to where in Camp such a disclosure can be found. The Examiner references laminated web structure 25, but such a reference does not serve as disclosing a crack initiator having a height greater than the thickness of a laminated structure. Also, as in Fruit, Camp fails to disclose a crack initiator as the term is used in the present application. Camp discloses an upper knife 22 and a lower knife 24, but nowhere in the

reference is there any teaching of a crack initiator as the term is used in the present application. Because of the deficiencies identified in Fruit and because Camp fails to remedy these deficiencies, a Section 103 rejection based on a combination of Fruit and Camp is improper and the Examiner is respectfully requested to withdraw the rejection.

In view of the foregoing remarks, reconsideration of this patent application is respectfully requested. A prompt and favorable action by the examiner is earnestly solicited.

Respectfully submitted,

A handwritten signature in cursive script, appearing to read "Paul A. Leipold", written in black ink.

Attorney for Applicant(s)
Registration No.

Paul A. Leipold/
Rochester, NY 14650
Telephone: (585)
Facsimile: (585)